

REMARKS

This amendment is responsive to the Office Action dated March 26, 2003. Applicant has cancelled claim 43, amended claims 1, 7-9, 11-12, 16-17, 22-23, 26, 38, 40, 41, 45, and added claims 49-51. Claims 1-42 and 44-51 are pending.

Claim Rejection Under 35 U.S.C. § 112

In the Office Action, the Examiner rejected claims 10, 22, 23, 26, 40, 41, and 45 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended the pending claims for purposes of clarification. Applicant submits that claims, as amended, particularly point out and distinctly claim the subject matter, as required by 35 U.S.C. 112, second paragraph.

Claim Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34 under 35 U.S.C. 102(b) as being anticipated by Johnson et al. (US 6,067,525). Applicant respectfully traverses the rejection to the extent such rejection may be considered applicable to the amended claims. Johnson et al. ("Johnson") fails to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(b), and provides no teaching that would have suggested the desirability of modification to include such features.

For example, Johnson fails to teach or suggest storing in a database data that defines a mathematical model having a plurality of related objects that represent business opportunities and conditions associated with achieving the business opportunities, as recited by Applicant's claim 1 as amended. Moreover, Johnson fails to teach or suggest generating a probability set indicating the probability of successfully achieving the business opportunities as a function of the input data and the mathematical model, as further recited by Applicant's claim 1.

In contrast, Johnson describes a sales force automation system that integrates salespersons support for multiple phases of a sales process. In rejecting Applicant's claim 1, the Examiner asserts that Johnson discloses storing business opportunities and associated conditions by describing "lead generation and sales information." For support of this assertion, the Examiner

refers to column 4, lines 35-40 of the Johnson reference. In the passage relied upon by the Examiner, however, Johnson does not describe data defining a mathematical model having a plurality of related objects that represents business opportunities and conditions associated with achieving the business opportunities, as claimed by the Applicant. Rather, Johnson generally describes information used to aid in identifying new customers and not conditions associated with successfully achieving current business opportunities. In particular, Johnson states that “sales information ... may also be used in conjunction with lead generation component to identify potential customers. For example, such information may be used to generate an electronic mailing to potential leads.” Consequently, the “sales information and lead generation” described by Johnson and relied upon by the Examiner in no way represents a set of the business opportunities and associated conditions for achieving the business opportunities.

As recited in claim 1, Applicant’s claimed invention defines a mathematical model having objects that represent the business opportunities and the conditions associated with achieving the business opportunities. As described in detail within Applicant’s disclosure, these conditions objectively represent activities performed by a sales organization and other facts that impact the achievement of the business opportunities. As one example, conditions may be defined to characterize the technology requirements of the target customer, and probabilities for achieving the business opportunities may be assigned based on the conditions.

Johnson does not describe a mathematical model having objects that relate the business opportunities and conditions, nor the generation of a probability set based on the model and input data indicating a status of at least one of the conditions, as recited by claim 1. With respect to these limitations, as recited in previously pending claim 7 now amended, the Examiner asserts that Johnson discloses a mathematical model wherein each condition is associated with an object within the model. For support, the Examiner summarily refers to expert system 2002 and FIG. 22 of Johnson.

In relevant part, however, Johnson states that expert system 2002 monitors successful sales events to allow the system to learn successful sales approaches and automatically implement such approaches in future sales processes. In other words, expert system 2002 is not concerned with mathematically modeling the probabilities of achieving current business opportunities based on the status of defined conditions, e.g., for purposes of objectively

forecasting revenue. To the contrary, the expert system 2002 of Johnson is concerned with analyzing completed sales events after their completion to identify events or actions that may have influenced the outcome. Accordingly, the Examiner is incorrect to characterize expert system 2002 as a model having a plurality of related objects that represents business opportunities and conditions associated with achieving the business opportunities.

In addition to these deficiencies, Johnson does not describe generating a probability set indicating the probability of successfully achieving the business opportunities as a function of input data indicating a status of at least one of the conditions and the defined mathematical model, as further recited in claim 1. In rejecting claim 1, the Examiner asserted that Johnson teaches these elements and relied on column 21, lines 20-23. In this passage, however, Johnson merely states that the sales force automation system includes a forecasting module that provides functional and product forecast information to the salesperson related to sales, revenue, commission and profit. Johnson states “[t]he [forecasting] module utilizes data for closed sales, data for opportunities with a stated prediction of close, or data for a combination of both as received from other components of the system to generate forecast reports (emphasis added).”

In other words, the forecasting module of the Johnson system appears to simply analyze closed sales or sales that have been identified as closing to generate forecast reports. To generate the forecasts, the forecasting module “accesses information generated with the quote module to prepare quotes for customers, such as unit quantity, quoted price and discount description, thereby basing the forecast on the most recent quotes which the salesperson has prepared.”¹ Consequently, although no specific methods are described, the forecasting module of Johnson apparently does nothing more than access quote information for closed or closing sales and generate a forecast. Thus, in no manner does the forecasting module generate a probability set indicating the probability that the current business opportunities will be successfully achieved based on a set of conditions and their current status. Moreover, in reference to the forecasting module, Johnson clearly does not describe, and provides no motivation for, the generation of the probabilities as a function of a mathematical model having a plurality of related objects that represents business opportunities and conditions associated with achieving the business opportunities.

¹ See FIG. 15C and related description.

Regarding claim 25, the Examiner again asserts that the forecasting module of the Johnson system generates a probability set indicating the probability of successfully achieving the business opportunities, as recited by the claim. As discussed in detail above, the forecasting module of the Johnson system simply analyzes closed sales or sales that have been identified as closing in order to generate forecast reports. Johnson clearly does not describe, and provides no motivation for, the generation of the probabilities as a function of a mathematical model having a plurality of related objects that represents business opportunities and conditions associated with achieving the business opportunities.

Johnson et al. fails to disclose each and every limitation set forth in claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34. For at least these reasons, the Examiner has failed to establish a prima facie case for anticipation of Applicant's claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34 under 35 U.S.C. 102(b). Withdrawal of this rejection is requested.

Claim Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 6,067,525), in view of Arbabi et al. (US 5,461,699). In addition, the Examiner rejected claim(s) 9, 14, 17-24, 30 and 35-48 as being unpatentable over Johnson et al. (US 6,067,525), in view of Lazarus et al. (US 6,430,539). Applicant respectfully traverses these rejections to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

To establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference or references when combined must teach or suggest each and every claim limitation. Second there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success.² The teaching or suggestion to make the claimed combination and the reasonable

² See MPEP 706.02(j) quoting In re Vaick, 947 F2d 488, 20 USPQ2d 1438 (Fed Cir. 1991).

expectation of success must both be found in the prior art, and not based on Applicant's disclosure. The reasoning set forth by the Examiner fails these well-established criteria.

For example, with respect to claims 9 and 18, the Examiner apparently asserts that it would be obvious to one of ordinary skill in the art to modify the forecasting module of the Johnson sales force system to apply a Bayesian model to generate a probability set based on input data indicating a status of at least one of the conditions, as recited by these claims. However, as described above, the forecasting module of the Johnson system analyzes closed sales or sales that have been identified as closing to generate forecast reports. Consequently, Johnson does not describe the elements recited by Applicant's claims. Moreover, Lazarus et al. ("Lazarus") does not address these deficiencies. In fact, Lazarus is directed to predictive modeling of consumer financial behavior and spending habits and makes only a cursory reference to Bayesian principles.

Thus, the modifications proposed by the Examiner would fail to achieve the Applicant's claimed invention. Assuming motivation for such a modification exists in the art, the forecasting module of Johnson as modified in view of Lazarus would apply a Bayesian model to forecast revenue from closed or closing sales. This is entirely different from applying a Bayesian model and input data indicating a status of at least one of the conditions to generate a probability set that indicates a probability of that a business opportunity will be achieved, as thoroughly described by the Applicant and recited by these claims.

With respect to claim 17, the Examiner asserts that it would be obvious to one of ordinary skill in the art to modify the expert system of the Johnson sales force system to calculate a second set of probabilities as a function of input data and the first set of probabilities, wherein second set of probabilities indicate the probability of successfully achieving the business opportunities. This argument again fails the well-established criteria for establishing a prima facie case of obviousness, as set forth above.

For example, as described in detail above, expert system 2002 of the Johnson system is not concerned with mathematically modeling the probabilities of achieving current business opportunities based on the status of defined conditions, e.g., for purposes of objectively forecasting revenue. To the contrary, the expert system 2002 of Johnson is concerned with analyzing completed sales events after the fact to identify events or actions that may have

influenced the outcome. Accordingly, the Examiner is incorrect to characterize expert system 2002 as a model having a plurality of related objects that represents business opportunities and conditions associated with achieving the business opportunities. Thus, the modifications proposed by the Examiner would fail to achieve the Applicant's claimed invention.

Moreover, the Examiner's interpretation of Lazarus is incorrect. In the cited passage, Lazarus does not disclose calculating a second set of probabilities as a function of input data, a mathematical model, and a first set of probabilities, wherein second set of probabilities indicate the probability of successfully achieving the business opportunities, as recited by claim 17. In fact, the cited passage does nothing more than express a probability distribution for a set of joint probability estimates \hat{P}_{ij} . Expressing a set of probabilities as a polynomial, as described by Lazarus, does not teach or suggest calculating a second set of probabilities based on a mathematical model, a first set of probabilities received from a user and representing estimate probabilities for achieving the opportunities, and input data indicating a status of a least one condition associated with achieving the business opportunities, as required by claim 17 as amended.

Claims 30 and 35-38 are patentable in view of the cited references for these or similar reasons. For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant's claims 9, 14, 17-24, 30 and 35-48 under 35 U.S.C. 103(a). Withdrawal of this rejection is requested.

New Claims:

Applicant has added claims 49-51 to the pending application. The applied references fail to disclose or suggest the inventions defined by Applicant's new claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions. No new matter has been added by the new claims.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any

additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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By:

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